

Escalating Construction and Labor Costs Global Issue

(From Task Force Hope's Status Report Newsletter, Oct. 30)



Rebar, H-beams and concrete were the main construction materials used for repairs and improvements of the Inner Harbor Navigation Canal floodgate.

As the U.S. Army Corps of Engineers settles in for the arduous task of repairing and building the 100-year hurricane protection system in southern Louisiana, it is faced with a challenge that has become global in nature: *the rising cost of construction materials*.

Since 2004, the costs of raw materials and construction supplies have increased dramatically worldwide, but it is more pronounced in southern Louisiana - due to hurricanes Katrina and Rita - than the national average.

Construction demands and their increased risks resulted in fewer bidders for Corps projects, bids being significantly higher than historically-based estimates, and owners and agencies having to reevaluate their work programs.

Key market drivers:

With constantly changing prices, contractors have passed project risks on to owners in the form of higher construction costs. Key market drivers are:

- Energy costs have spiked significantly
- Insurance and bonding costs are speculative
- Lack of skilled workers to meet the demand
- Global material demand exceeding supply
- Natural disasters: Hurricanes Katrina and Rita

When markets experience rapid growth in demand for construction services, the supply of contractors, materials and labor cannot readily respond. This leads to increased costs for resources, and shortages of both labor and materials.

Here are some U.S. cost comparisons from 2004 to 2006:

Concrete.....up 88%
Copper.....up 235%
Diesel fuel.....up 91%
Natural gas.....up 107%
Drywall.....up 91%
PVC pipe.....up 37%

Corps Takes Action:

As the prices of materials and the need for construction and improvements to infrastructure continue, cost estimators have to develop new ways for presenting accurate projections despite a dynamic marketplace. In order to provide better estimates, the U.S. Army Corps of Engineers has taken the following steps to project a more precise dollar figure for projects:

- Performing value engineering studies – review plans and specifications to ensure all cost effective alternatives are considered
- Utilize commodity supply contracts (borrow soil, steel sheet piles and H-piles) to get bulk pricing and remove contractor risk
- For work with high and uncertain risks, use cost reimbursable contracting techniques
- Use Design/Build contracts for complicated projects elements
- Partnering with industry leaders to better understand market conditions in order to create better cost estimates

This bar chart illustrates cost comparisons of building materials in the United States for years 2004 vs. 2006. Escalating construction costs have become a challenge to builders locally and worldwide in recent years. (USACE Illustration)

